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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,526	06/23/2003	Dong Han Seo	3449-0244P	5826

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EXAMINER
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JACKSON, BLANE J

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/600,526	Applicant(s) SEO ET AL.	
	Examiner Blane J. Jackson	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16 and 16 is/are rejected.
- 7) ☒ Claim(s) 17-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's election with traverse of Group 1 in the reply filed on 21 April 2006 is acknowledged. The traversal is on the ground(s) that the restriction is not proper because the Examiner has not met the burden of proving that the groupings are independent as required by the United States Code, the Code of Federal Regulation and the Manual of Patent examining Procedure. This is not found persuasive because the inventions are distinct in that the inventions require a separate classification thereof as shown in the Restriction. Section 808 of the MPEP identifies every requirement to restrict has two aspects: the reason why each invention as claimed is either **independent or distinct** from the others and the reasons why there would be a serious burden on the examiner if restriction is not required. See MPEP section § 808.02, Establishing Burden discusses where the examiner must show by appropriate explanation the inventions require separate classification, field of search or status.

The requirement is still deemed proper and is therefore made FINAL.

### *Election/Restrictions*

Claims 11-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 24 April 2006.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hulsebosch et al. (US 5,625,535) in view of Barzegar et al. (US 5,559,501).

As to claim 15, Hulsebosch teaches an apparatus for improving processing sensitivity of a *portable computer* comprising:

Power switching means for performing a switching operation to stably supply power to the public wave receiver (figures 2, column 6, lines 21-61, switching power supply module (38) of portable computer chassis (36)),

Shielding means for shielding noise generated by the power switching means (figure 2, column 8, lines 59-67, power module (38) with EMI shielding (42)),

Cooling means for lowering a temperature of the power switching means (figure 4, column 4, line 24 to column 8, line 11, switching transistors of power supply module (38) generate significant amount of heat that is transferred to the electromagnetic shield (42) that also acts as a heat sink),

Hulsebosch discloses an apparatus for improving processing sensitivity of a portable computer, column 2, lines 31-40, but does not teach an apparatus for improving reception sensitivity of a public wave receiver with noise intercepting means for preventing noise from being transmitted to antenna means connected to the public wave receiver.

Barzegar discloses a portable computer that functions as a wireless enabled host comprising a built in pair of antenna (figure 1, (104 and 105)), a special plug in receptacle enabling plug in of a wireless communicator that conforms to the PCMCIA standard and EMI shielded cabling, internal to the computer housing, to connect the plug-in wireless transceiver and antenna, figure 1, column 2, lines 15-55. Barzegar teaches the computer receptacles and special plug in module includes mating RF connectors (figure 17, plug in module (206)) where these and the internal EMI-shielded cabling or RF coaxial cables and RF connectors in the host computer to transfer RF signals between the antenna and card receiver where the cables and RF connectors function as noise intercepting means for preventing noise from being transmitted to antenna means connected to the public wave receiver, column 2, lines 15-55.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the portable computer of Hulsebosch with the wireless communication equipment as taught by Barzegar for wireless communication by the portable computer without interference for the computer of PDA itself.

As to claim 16, Barzegar of Hulsebosch modified teaches the apparatus of claim 15 wherein the noise intercepting means comprises a connecting wire including a signal line, a ground line and a shield layer composed of an insulating material formed between the signal line and the ground (figures 5, 11 and 12, column 2, lines 45-55, the RF connectors and internal RF cables are constructed coaxially with an insulating material formed between the signal line and the ground line/shield layer).

***Allowable Subject Matter***

Claims 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-10 are allowed. The prior art made of record teaches the individual claim elements such as a shielding plate or cap by Kahl et al. including a shielding surface for shielding a top surface of *electronic components (not a power device)* with mounting legs extending from the shielding surface and mounted on the substrate but does not teach the combination of elements of a an apparatus for improving reception sensitivity of a *public wave receiver* comprising a conductive *shielding plate* for shielding a top surface of at least one *power device* of a *switching power supply* with *mounting legs* extending from the shielding surface and mounted on the substrate.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen et al. (US 6,366,486), Henningsson et al. (US 5,541,811), Kahl et al. (US 6,420,649), Takehara (US 6,556,456), Ogino et al. (US 6,195,540), Andres et al. (US 6,950,291), Hamilton et al. (US 5,802,484), Gammon (US 5,847,938), MacDonald, Jr. et al. (US 6,195,267), Nagata et al. (US 6,582,785), Tani (US 6,525,946), Marrs (5,482,898) and West (US 6,649,827)/

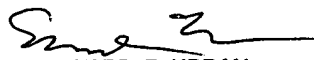
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J. Jackson whose telephone number is (571) 272-7890. The examiner can normally be reached on Monday through Friday, 9:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BJJ

  
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